CLAIMS

What is claimed is:

1.   A method in a data processing system for developing source code having a plurality of elements, the method comprising the steps of:

5   converting the source code into a language-neutral representation;

using the language-neutral representation to display a graphical representation of the plurality of elements;

receiving a selection of one of the plurality of elements;

receiving an indication of a distance;

10   receiving an indication of a type of link;

determining from the language-neutral representation which of the plurality of elements is connected to the selected element via a link of the indicated type and within the indicated distance; and

displaying the determined elements.

15   2.   The method of claim 1, wherein the selected element comprises a class.

3.   The method of claim 1, wherein the determined element comprises a class.

4.   The method of claim 1, wherein the selected element comprises an interface.

20   5.   The method of claim 1, wherein the determined element comprises an interface.

6.   The method of claim 1, wherein the type comprises a reference.

7.   The method of claim 1, wherein the type comprises a super class.

8.   The method of claim 1, wherein the type comprises a sub class.

9.   The method of claim 1, wherein the type comprises a super interface.

10.   The method of claim 1, wherein the type comprises a sub interface.

11.   The method of claim 1, wherein the type comprises an implemented interface.

12.   The method of claim 1, wherein the type comprises an association.

13.   The method of claim 1, wherein the type comprises a dependency.

14.   The method of claim 1, wherein the type comprises an aggregation.

15.   The method of claim 1, wherein the type comprises a composition.

16.   The method of claim 1, wherein the type comprises an inheritance.

17.   The method of claim 1, wherein the type comprises an implementation.

18.   The method of claim 1, wherein the selected element and the examined element are in a package.

19.   A method in a data processing system for developing source code having a plurality of elements, the method comprising the steps of:

receiving a selection of one of the plurality of elements;

receiving an indication of a distance;

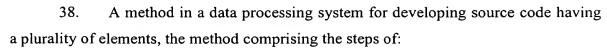5   receiving an indication of a type of link; and

determining which of the plurality of elements is connected to the selected element via a link of the indicated type and within the indicated distance.

20.   The method of claim 19, further comprising the step of displaying the determined elements.

10   21.   The method of claim 19, wherein the selected element comprises a class.

22.   The method of claim 19, wherein the determined element comprises a class.

23.   The method of claim 19, wherein the selected element comprises an interface.

15   24.   The method of claim 19, wherein the determined element comprises an interface.

25.   The method of claim 19, wherein the type comprises a reference.

26.   The method of claim 19, wherein the type comprises a super class.

27.   The method of claim 19, wherein the type comprises a sub class.

20   28.   The method of claim 19, wherein the type comprises a super interface.

29.   The method of claim 19, wherein the type comprises a sub interface.

30.   The method of claim 19, wherein the type comprises an implemented interface.

31.   The method of claim 19, wherein the type comprises an association.

32.   The method of claim 19, wherein the type comprises a dependency.

5   33.   The method of claim 19, wherein the type comprises an aggregation.

34.   The method of claim 19, wherein the type comprises a composition.

35.   The method of claim 19, wherein the type comprises an inheritance.

36.   The method of claim 19, wherein the type comprises an implementation.

37.   The method of claim 19, wherein the selected element and the examined
10   element are in a package.

38.   A method in a data processing system for developing source code having a plurality of elements, the method comprising the steps of:

receiving a selection of one of the plurality of elements;
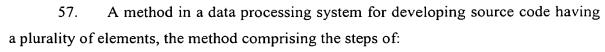
receiving an indication of a distance; and

5   determining which of the plurality of elements is within the indicated distance from the selected element.

39.   The method of claim 38, further comprising the step of displaying the determined elements.

40.   The method of claim 38, wherein the selected element comprises a class.

10   41.   The method of claim 38, wherein the determined element comprises a class.

42.   The method of claim 38, wherein the selected element comprises an interface.

43.   The method of claim 38, wherein the determined element comprises an interface.

15   interface.

44.   The method of claim 38, wherein the type comprises a reference.

45.   The method of claim 38, wherein the type comprises a super class.

46.   The method of claim 38, wherein the type comprises a sub class.

47.   The method of claim 38, wherein the type comprises a super interface.

20   48.   The method of claim 38, wherein the type comprises a sub interface.

49. The method of claim 38, wherein the type comprises an implemented interface.

50. The method of claim 38, wherein the type comprises an association.

51. The method of claim 38, wherein the type comprises a dependency.

5 52. The method of claim 38, wherein the type comprises an aggregation.

53. The method of claim 38, wherein the type comprises a composition.

54. The method of claim 38, wherein the type comprises an inheritance.

55. The method of claim 38, wherein the type comprises an implementation.

56. The method of claim 38, wherein the selected element and the examined

10 element are in a package.

57.   A method in a data processing system for developing source code having a plurality of elements, the method comprising the steps of:

receiving a selection of one of the plurality of elements;

receiving an indication of a type of link; and

5   determining which of the plurality of elements is connected to the selected element via a link of the indicated type.

58.   The method of claim 57, further comprising the step of displaying the determined elements.

59.   The method of claim 57, wherein the selected element comprises a class.

10   60.   The method of claim 57, wherein the determined element comprises a class.

61.   The method of claim 57, wherein the selected element comprises an interface.

62.   The method of claim 57, wherein the determined element comprises an

15   interface.

63.   The method of claim 57, wherein the type comprises a reference.

64.   The method of claim 57, wherein the type comprises a super class.

65.   The method of claim 57, wherein the type comprises a sub class.

66.   The method of claim 57, wherein the type comprises a super interface.

20   67.   The method of claim 57, wherein the type comprises a sub interface.

68. The method of claim 57, wherein the type comprises an implemented interface.

69. The method of claim 57, wherein the type comprises an association.

70. The method of claim 57, wherein the type comprises a dependency.

71. The method of claim 57, wherein the type comprises an aggregation.

72. The method of claim 57, wherein the type comprises a composition.

73. The method of claim 57, wherein the type comprises an inheritance.

74. The method of claim 57, wherein the type comprises an implementation.

75. The method of claim 57, wherein the selected element and the examined element are in a package.

76.   A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system having source code comprising a plurality of elements, the method comprising the steps of:

converting the source code into a language-neutral representation;

5   using the language-neutral representation to display a graphical representation of the plurality of elements;

receiving a selection of one of the plurality of elements;

receiving an indication of a distance;

receiving an indication of a type of link;

10   determining from the language-neutral representation which of the plurality of elements is connected to the selected element via a link of the indicated type and within the indicated distance; and

displaying the determined elements.

77.   The computer-readable medium of claim 76, wherein the selected element
15 comprises a class.

78.   The computer-readable medium of claim 76, wherein the determined element comprises a class.

79.   The computer-readable medium of claim 76, wherein the selected element comprises an interface.

20   80.   The computer-readable medium of claim 76, wherein the determined element comprises an interface.

81.   The computer-readable medium of claim 76, wherein the type comprises a reference.

82.   The computer-readable medium of claim 76, wherein the type comprises a
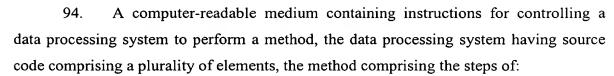25 super class.

83.   The computer-readable medium of claim 76, wherein the type comprises a sub class.

84.   The computer-readable medium of claim 76, wherein the type comprises a super interface.

85.   The computer-readable medium of claim 76, wherein the type comprises a sub interface.

86.   The computer-readable medium of claim 76, wherein the type comprises an implemented interface.

87.   The computer-readable medium of claim 76, wherein the type comprises an association.

88.   The computer-readable medium of claim 76, wherein the type comprises a dependency.

89.   The computer-readable medium of claim 76, wherein the type comprises an aggregation.

90.   The computer-readable medium of claim 76, wherein the type comprises a composition.

91.   The computer-readable medium of claim 76, wherein the type comprises an inheritance.

92.   The computer-readable medium of claim 76, wherein the type comprises an implementation.

93.   The computer-readable medium of claim 76, wherein the selected element and the examined element are in a package.

94.   A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system having source code comprising a plurality of elements, the method comprising the steps of:

receiving a selection of one of the plurality of elements;

receiving an indication of a distance;

receiving an indication of a type of link; and

determining which of the plurality of elements is connected to the selected element via a link of the indicated type and within the indicated distance.

95.   The computer-readable medium of claim 94, wherein the method further comprises the step of displaying the determined elements.

96.   The computer-readable medium of claim 94, wherein the selected element comprises a class.

97.   The computer-readable medium of claim 94, wherein the determined element comprises a class.

98.   The computer-readable medium of claim 94, wherein the selected element comprises an interface.

99.   The computer-readable medium of claim 94, wherein the determined element comprises an interface.

100.   The computer-readable medium of claim 94, wherein the type comprises a reference.

101.   The computer-readable medium of claim 94, wherein the type comprises a super class.

102. The computer-readable medium of claim 94, wherein the type comprises a sub class.

103. The computer-readable medium of claim 94, wherein the type comprises a super interface.

104. The computer-readable medium of claim 94, wherein the type comprises a sub interface.

105. The computer-readable medium of claim 94, wherein the type comprises an implemented interface.

106. The computer-readable medium of claim 94, wherein the type comprises an association.

107. The computer-readable medium of claim 94, wherein the type comprises a dependency.

108. The computer-readable medium of claim 94, wherein the type comprises an aggregation.

109. The computer-readable medium of claim 94, wherein the type comprises a composition.

110. The computer-readable medium of claim 94, wherein the type comprises an inheritance.

111. The computer-readable medium of claim 94, wherein the type comprises an implementation.

112.   The computer-readable medium of claim 94, wherein the selected element and the examined element are in a package.

113. A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system having source code comprising a plurality of elements, the method comprising the steps of:

receiving a selection of one of the plurality of elements;

5   receiving an indication of a distance; and

determining which of the plurality of elements is within the indicated distance from the selected element.

114. The computer-readable medium of claim 113, wherein the method further comprises the step of displaying the determined elements.

10   115. The computer-readable medium of claim 113, wherein the selected element comprises a class.

116. The computer-readable medium of claim 113, wherein the determined element comprises a class.

117. The computer-readable medium of claim 113, wherein the selected

15   element comprises an interface.

118. The computer-readable medium of claim 113, wherein the determined element comprises an interface.

119. The computer-readable medium of claim 113, wherein the type comprises a reference.

20   120. The computer-readable medium of claim 113, wherein the type comprises a super class.

121. The computer-readable medium of claim 113, wherein the type comprises a sub class.

122.   The computer-readable medium of claim 113, wherein the type comprises a super interface.

123.   The computer-readable medium of claim 113, wherein the type comprises a sub interface.

5   124.   The computer-readable medium of claim 113, wherein the type comprises an implemented interface.

125.   The computer-readable medium of claim 113, wherein the type comprises an association.

126.   The computer-readable medium of claim 113, wherein the type comprises
10   a dependency.

127.   The computer-readable medium of claim 113, wherein the type comprises an aggregation.

128.   The computer-readable medium of claim 113, wherein the type comprises a composition.

15   129.   The computer-readable medium of claim 113, wherein the type comprises an inheritance.

130.   The computer-readable medium of claim 113, wherein the type comprises an implementation.

131.   The computer-readable medium of claim 113, wherein the selected
20   element and the examined element are in a package.

132.   A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system having source code comprising a plurality of elements, the method comprising the steps of:

receiving a selection of one of the plurality of elements;

receiving an indication of a type of link; and

determining which of the plurality of elements is connected to the selected element via a link of the indicated type.

133.   The computer-readable medium of claim 132, wherein the method further comprises the step of displaying the determined elements.

134.   The computer-readable medium of claim 132, wherein the selected element comprises a class.

135.   The computer-readable medium of claim 132, wherein the determined element comprises a class.

136.   The computer-readable medium of claim 132, wherein the selected element comprises an interface.

137.   The computer-readable medium of claim 132, wherein the determined element comprises an interface.

138.   The computer-readable medium of claim 132, wherein the type comprises a reference.

139.   The computer-readable medium of claim 132, wherein the type comprises a super class.

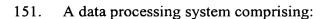140.   The computer-readable medium of claim 132, wherein the type comprises a sub class.

141.   The computer-readable medium of claim 132, wherein the type comprises a super interface.

142.   The computer-readable medium of claim 132, wherein the type comprises a sub interface.

5   143.   The computer-readable medium of claim 132, wherein the type comprises an implemented interface.

144.   The computer-readable medium of claim 132, wherein the type comprises an association.

145.   The computer-readable medium of claim 132, wherein the type comprises
10   a dependency.

146.   The computer-readable medium of claim 132, wherein the type comprises an aggregation.

147.   The computer-readable medium of claim 132, wherein the type comprises a composition.

15   148.   The computer-readable medium of claim 132, wherein the type comprises an inheritance.

149   The computer-readable medium of claim 132, wherein the type comprises an implementation.

150.   The computer-readable medium of claim 132, wherein the selected
20   element and the examined element are in a package.

151.   A data processing system comprising:

a secondary storage device further comprising source code having a plurality of elements;

a memory device further comprising a program that receives a selection of one of the plurality of elements, that receives an indication of a distance, that receives an indication of a type of link, and that determines which of the plurality of elements is connected to the selected element via a link of the indicated type and within the indicated distance; and

a processor for running the program.

152.   The data processing system of claim 151, wherein the program further displays the determined elements.

153.   The data processing system of claim 151, wherein the selected element comprises a class.

154.   The data processing system of claim 151, wherein the determined element comprises a class.

155.   The data processing system of claim 151, wherein the selected element comprises an interface.

156.   The data processing system of claim 151, wherein the determined element comprises an interface.

157.   The data processing system of claim 151, wherein the type comprises a reference.

158.   The data processing system of claim 151, wherein the type comprises a super class.

159.   The data processing system of claim 151, wherein the type comprises a sub class.

160.   The data processing system of claim 151, wherein the type comprises a super interface.

5   161.   The data processing system of claim 151, wherein the type comprises a sub interface.

162.   The data processing system of claim 151, wherein the type comprises an implemented interface.

163.   The data processing system of claim 151, wherein the type comprises an
10   association.

164.   The data processing system of claim 151, wherein the type comprises a dependency.

165.   The data processing system of claim 151, wherein the type comprises an aggregation.

15   166.   The data processing system of claim 151, wherein the type comprises a composition.

167.   The data processing system of claim 151, wherein the type comprises an inheritance.

168.   The data processing system of claim 151, wherein the type comprises an
20   implementation.

169.   The data processing system of claim 151, wherein the selected element and the examined element are in a package.

170.   A system for developing source code having a plurality of elements, the system comprising:

        means for receiving a selection of one of the plurality of elements;

        means for receiving an indication of a type of link; and

5   means for determining which of the plurality of elements is connected to the selected element via a link of the indicated type.